Evolution of Blood Pressure Control in Selected Hypertensives Followed in a Hypertension Outpatient Clinic

**Aim of the Study**
The aim of this study was to investigate the evolution of clinical blood pressure (BP) control in a large cohort of hypertensive patients, regularly treated and followed in a hypertension outpatient clinic, comparing the prevalence of BP control in a group of hypertensives, visited during 2000, with that observed in a group with similar characteristics, studied during 1998 (J Hypertens 1999).

**Population and Methods**
902 consecutive hypertensives (469 men, 433 women, mean age 59±12 years), attending our hypertension outpatient clinic, during the year 2000, and followed up the same medical team and Centro di Fisiologia Clinica e Ipertensione, Università di Milano, Ospedale Maggiore di Milano IRCCS, Milano, Italy.

**Results**
Clinical BP values, in treated patients, resulted: 138±14/84±8 mmHg in group I and 142±16/87±9 mmHg in group II (p<0.01) with a lower percentage of monotherapy in group I (30%) than group II (35%). The prevalence of BP values, divided in 3 tertiles, under treatment resulted in group I: 60% in the tertile >140/90 mmHg, 39% in that one ≤160/95 mmHg, and 9% in that one >160/95 mmHg; whilst in group II it resulted 50%, 28% and 22% respectively. A satisfactory BP control (BP<140/90 mmHg) was observed in the 44% of hypertensives of group I, versus 36% of group II (p<0.01); however, a low prevalence of optimal BP control (BP<130/85 mmHg) was documented in each group (17 vs 16%). Finally, considering independently systolic and diastolic BP values, the percentage of patients, in both groups with satisfactory diastolic BP control was higher than the percentage of individuals with adequate systolic BP levels (65% vs 51%, p<0.01 and 53% vs 40%, p<0.01, respectively).

**Conclusion**
This study demonstrates that: 1) prevalence of effective BP control in treated hypertensives, attending a specialist clinic, seems to improve significantly during the time; 2) systolic BP control results more difficult to reach than diastolic BP control; 3) prevalence of optimal BP values, under treatment, is still very low.

Key Words: Blood pressure control

Nocturnal Fall and “Siesta” Reduction in Systolic Blood Pressure: Similarities and Differences Age & Gender-Related

Prognostic value of blunted BP night-time reduction might be useful in hypertensive evaluation. In the present study we evaluated pattern and profiles of 24-h ambulatory systolic BP recording, with regard to similarities and differences during afternoon (“siesta”) and night-time periods in six groups of age of untreated hypertensives: group I, from 35 to 40 years (104 males - 72 females); group II (110 M - 102 F) 41 to 45 years, group III (151 M-125 F) 46 to 50 years, group IV (86 M-106 F) 61 to 65 years, group V (53 M - 98 F) 66 to 70 years, group VI (31 M - 61 F) 71 to 75 years. All patients were uncomplicated and with no previous cardiovascular events and they carried out 24-h ambulatory BP monitoring. Nocturnal systolic BP fall into three younger group of patients was always greater compared to the afternoon in both males and females, whereas into three elderly groups nocturnal systolic BP fall was blunted and with values comparable to that observed during siesta period in both males and females.

Key Words: Nocturnal fall, Siesta, Systolic BP

Serum Cholesterol Affects Blood Pressure Regulation

A close relationship between abnormalities of the lipid metabolism and arterial hypertension has been observed in several epidemiological studies. The aim of the present study was to investigate whether serum cholesterol (chol) might affect blood pressure (BP) levels at rest, during ambulatory monitoring or during sympathetic stimulation - independently of other variables such as body weight or serum insulin - thus influencing the outcome of hypertensive complications. Seventy-three patients with sustained newly-discovered and never-treated hypertension were divided into tertiles according to their serum chol levels and their resting BP, 24h BP and BP during isometric exercise (handgrip) were compared. Cardiac mass and carotid wall thickness were measured by echographic technique. Tertiles were similar for body weight, blood glucose and serum insulin, but different for serum chol and triglycerides. BP at rest and during 24h monitoring was similar in the three groups, whilst a significant difference was detected during sympathetic stimulation by handgrip, with SBP/DBP increasing by 16/12, 28/19 and 30/23 mmHg (p<0.01) in lower, medium and higher tertile, respectively. Intima-media layer of the carotid arteries was also significantly thickened in the groups with higher chol levels (0.54±0.07, 0.67±0.14, 0.68±0.15, p<0.05). These data indicate that chol levels are positively associated to BP response to adrenergic stimulation even in patients with recently discovered hypertension. Whether chol lowering drugs might help in improving BP control in this patients is to be clarified.

Key Words: Serum cholesterol, Isoometric exercise, Intima media thickness